

Claims

- [c1] 1-Procedures and methods for electrical actuation of non-biological artificial muscles, such as ionic polymeric synthetic artificial muscles and electroactive polymers, by means of action potential generated by biological nerve, such as mammalian sciatic nerve.
- [c2] 2- Procedures and methods for using the nerve of a biological system or entity to generate an action potential, which is subsequently, amplified and applied to a sample of an electro-active ionic polymeric artificial muscle to cause it to bend, flex, deform, stretch, contract and twitch.
- [c3] 3- Procedures and methods for using the nerve of a biological system or entity to generate an action potential, which is subsequently, amplified and applied to a sample of an electro-active artificial muscle, material or system to cause them to deform, change shape, become dynamically active, bend, flex, stretch, contract and twitch.